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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/689,302

Applicant(s)

JONES, WILLIAM J.

Examiner

Bruce I. Ebersman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10/31/07.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/55/02)
Paper No(s)/Mail Date 10/20/03, 6/01/04, 10/30/07
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

The following is a non-final, first office action on the merits. Review of the claims necessitated the rejections and objections below.

CLAIM REJECTION

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 25, 32 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per claim 25, applicant's pre-amble uses the terms comprising twice, ie a multi-stage currency system comprising a first stage including a plurality etc.... and later uses comprising again, ie "the method comprising;" which is the traditional end of the applicant's pre-amble. The pre-amble as currently described is confusing leaving the examiner to wonder if the preamble should have started after the first comprising or the last one. Applicant is requested to review and correct.

As per claim 32, applicant's claim is overly confusing;

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"The method of claim 25 wherein grouping further comprises grouping according to a pre-determined criteria selected from the group consisting of an operator of the first stage processing devices, a specific first stage device, currency processed by a first stage device during a specific time period and customer identification. "

The use of comprising and selected from the group consisting of, is confusing but, also possibly failing to claim what is apparently a clear inventive concept. One suggested method to resolve this would be to change the claim to, "the predetermined criteria being at least one of the following;. Appropriate changes are requested.

CLAIM REJECTIONS- 35 USC 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6, 11-48, 50-77 rejected under 35 USC 103(a) as being unpatentable over US Patent 5917930 to Kayani in view of US Patent Publication 2004/0003980 to Hallowell.
As per claim 1, Kayani discloses;

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Claims 1, 25, 46, 54, 70, 71, and 75

a first currency processing stage including a plurality of currency processing devices having at least one output receptacle, (Kayani, Col. 5, Line 5 sort bins)

each of the devices being adapted to denominate currency bills, (Kayani, Col. 5, line 5)

being adapted to output a plurality of first batches of currency bills processed in the first stage, (Kayani, Col 5, line 65)

each first batch having an associated first total corresponding to the value of the currency bills in a respective first batch; (Kayani, Col. 2, line 45)

the second stage including at least one second stage currency processing device having a plurality of output receptacles, (see Kayani, p1, currency sort)

the at least one second stage currency processing device being adapted to denominate currency bills (Kayani, Col. 8, Claim 6d)

and to sort currency bills into the plurality of output receptacles, (Kayani, Col. 8, claim 6d)

the at least one second stage device adapted to determine a second total associated with each first batch processed by the at least one second stage device, (Kayani, Col 8, claim 6f, totals also inherent to counting)

the second total corresponding to the value of the currency bills in a first batch processed by the at least one second stage device, (Kayani, Col 8, Claim 6f)

the second stage being adapted to output a plurality of second batches of currency bills processed in the second stage, (examiner notes that it is inherent to output what was processed)

each second batch having an associated third total corresponding to the value of the currency bills in a respective second batch; (Kayani, Col. 8, claim 12d)

the third stage having a plurality of third stage currency processing devices having at least one output receptacle, (examiner notes that output receptacles are inherent in currency processing)

Kayani does not specifically disclose a central processing device such as a computer to control and

Operate the various comparison functions however, examiner notes that central processors and Computerization are inherent in modern accounting and machine control applications and likely part of Kayani's implementation.

Kayani does not specifically disclose an operation where bills are counted, ie the machine suspended at a Predetermined number so that the bills can be strapped though, counting is inherently a feature of this machine.

Hallowell teaches

A device which counts currency bills and can strap them together after a predetermined number. (0007) The ability to count and stop would be likewise a potential feature of any device which counts including Kayani, when a predetermined number of currency bills are transported to the at least one output receptacle, (0005). for the purpose of gather bills together for strapping. Hallowell further teaches a control unit (0080) and computer to control the machine operation and verify outputs at various stages to verify accurate count totals through the process of currency processing.

It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to combine the currency sorting, discriminating and counting machine disclosure of Kayani with the currency strapping, counting and processor unit of Hallowell for the purpose of providing a system where mixed intakes of currency, notes etc. can be scanned, counted, checked, discriminated and sorted into stacks of like denomination for strapping.

The examiner notes that claims 46 ,54, perform the same functions as 1 and 26. Further, the claimed processing system appears to be claiming the automation via a

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computer or a combination of existing and patented off the shelf equipment. In *In re. Verner* –262 F.2d 91, 95, 120 USPQ 193, 194 (CCPA 1958) the court held that broadly providing an automatic or mechanical means to replace manual activity which accomplished the same result is not sufficient to distinguish over the prior art. Likewise, in *In re Larson*, 340 F.2d 965, 968, 144 USPQ 34, 349 (CCPA 1965), the court further held that incorporating existing functions, ie combining existing elements that are usable together was not patentable.

Applicant's invention as claimed appears in sum to be claiming a combination of existing machines coupled by computer. The prior art cited appears to accomplish the same end claimed functionality in an automated fashion.

As per claims 2,3,4, 26, 28, 47,48, 55

Kayani discloses a machine operator (Col. 3, line 3) but does not specifically disclose an interface (computer). Hallowell (0080) teaches an operator interface (computer) to allow the currency sorting and strapping machine to be programmed, instructed by an operator.

It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to combine the machine disclosure of Kayani with the operator interface

teachings of Hollowell for the purpose of creating an operator interface to interface with a currency sorting machine and allow complex instructions to be coded.

As per claim 5, Kayani does not specifically disclose a storage cassette. Hollowell (fig. 3a) and 0093 teaches a storage cassette for the purpose of holding currency. It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to combine the currency sorting teachings of Kayani with the storage cassettes of Hollowell for the purpose of storing currency.

As per claim 6, Kayani teaches tracking the operator associated with processing of the first batch, in this case, the teller or branch, (Col 2, line 60) by the use of special separator cards. The operator of the machine or device would be inherently associated with the use of banking machines with controllers and or computers.

As per claims 11, 27, Kayani discloses separator cards to separate batches. (Col 2, line 60) and further discloses that the separator cards could separate by teller, by customer depositing etc.

As per claims 12, 13, 33, 34 Kayani (Col. 6, line 15) discloses error detection capabilities related to comparing inputs and outputs and further has error signaling (Col. 7, line 25) for the purpose of signaling errors.

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As per claims 14, 15, 35, 60, Kayani discloses sorting currency by denomination (Claim 6d).

As per claims 16, 36 Kayani (claim 6d) the ability to sort by denomination, Kayani does not specifically disclose operator interfaces capable of receiving input as to the currency denomination to be processed. Howell, (0081) teaches that the operator can direct currency denominations to specific bins for the purpose of controlling currency processing. It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to combine the sorting ability of Kayani with the operator controls of the output bins of Howell for the purpose of controlling which denominations are processed and which bin they end up.

As per claims 17-19, 37, 38, 40 Kayani does not specifically disclose a stranger error signal, ie an error because a bill is not reading correctly or of the expected denomination, only error detection. Howell teaches sidetracking errant notes and bills (0169) and the concept of error signal generator to warn an operator (0247). It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to combine the currency processing invention of Kayani which does have some error detection capability with the sidetracking and error warning teachings of Howell for the purpose of side tracking bills which are not as expected and warning the operator, stop operation in conjunction which such an error.

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As per claims 20-21, 41,42, 50,51 Kayani discloses output receptacles, though his machine is integrated so, 1st stages per se are not applicable. However, Kayani discloses multiple outputs. Hallowell teaches an input receptacle (one) and plurality of output receptacles. (0007) for the purpose of providing multiple output paths. It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to combine the currency processing device of Kayani with the currency processing and strapping device with receptacles of Howell for the purpose of creating a currency sorting, discriminating and counting device with multiple receptacles.

As per claim 22-24 and 43-45, 52, 56 Kayani discloses verification of the authenticity of currency bills.

As per claim 29, Kayani does not specifically disclose a central processor though one is inherent to any complex machine of this type. Hallowell (0081) teaches a control unit and central processor for the purpose of coordinating complex machine operation and data collection. It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to combine the currency sorting machine of Kayani which does not specifically disclose a central processor with the central processing concept of Hallowell for the purpose of controlling the process of currency analysis, sorting, counting and strapping.

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As per claim 30, Kayani discloses a variety of sort bins but, does not specifically teach output receptacles. Hollowell (0081) teaches receptacles for the purpose of organizing currency in a logical manner. It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to combine the sort bin disclosure of Kayani with the receptacle disclosure of Hollowell for the purpose of organizing batches of currency.

As per claim 31, Kayani (Col. 5, line 5) discloses sorting by denomination into sort bins).

As per claim 32, examiner noted in section #1 that the claim is ambiguous and difficult to comprehend, claiming a pre-determined criteria selected from a group consisting....., implies both closed end (consisting) but, unclear as to which are to be selected or if all are required. Examiner will assume that the applicant means that the invention includes elements from the group, in an order which is not defined, though logical.

Kayani discloses an operator (Col. 3, line 2), devices of various stages incorporated into a device (see application col. 2, line 20-35, ie intake, processing, denominating, sorting etc), currency processed by first stage during a specified period of time (Col. 2, line 30), and customer identification. (Col. 2, line 62).

As per claim 39, Kayani (Claim 3f) discloses the ability to off sort currency bills wich are non-authentic. Likewise, (claim 6d) discloses the ability to sort by currency

denomination. Kayani (Col. 7, line 20) discloses error detection. Howell (0169) further teaches offsorting errant currency. It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to combine the error identification and sorting capability in a currency processor of Kayani with the offsorting of error teachings of Hallowell for the well known purpose of identifying suspect bills and sidetracking them for further investigation.

As per claim 53, Kayani discloses checking for counterfeit bills (Col. 6, line 5) but not specifically unfit bills. Hallowell teaches unfit bills (0169) for the purpose of sorting out currency which is not fit for circulation. It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to combine the selectivity of Kayani in currency processing with the specific unfit teachings of Hallowell in the art of currency processing for the purpose of processing currency and removing unfit bills from circulation.

As per claim 57, Kayani discloses receiving input data (Col. 2, line 7 and Col 2, line 40) which would include account number balance , date (inherent in banking deposit slip) and other relevant data. Kayani does not specifically disclose an operator interface though an operator implies some form of interface. Hallowell teaches an operator interface (0080) for the purpose of operating a currency processing machine and further controlling it. It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to combine the data disclosures of Kayani which are common

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to deposits with the operator interface of Hallowell for the purpose of allowing an operator to input data indicative of the origin of the currency being processed.

As per claim 58, Kayani discloses a machine for processing currency and the ability to track relevant deposit information. (Col. 2, line 7) Hallowell teaches the ability to handle a variety of currency substitutes (0074) for the purpose of handling analogous materials.

The examiner notes that where the prior art describes all of the claimed structural and functional relationships between the descriptive material and the computer, but the prior art describes a different descriptive material than the claim, then the descriptive material is non-functional and will not be given any patentable weight. Examiner concludes that the inclusion of a variety of data for data entry in a data entry field is non-functional descriptive material and neither enhances nor diminishes the functionality of the data entered. See MPEP 2106.01

It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to combine the data entry described in Kayani (including deposits which inherently would include checks and credit card entries) with the multiple applicable types of documents and notes processed of Hallowell for the purpose of entering data relevant to the deposit intake from a bank or other customer.

As per claim 59, Kayani claim 12d discloses comparing counts at pre and post processing stages, presumably in order to prevent counting errors. Since Kayani is an integrated machine, some of the claimed verification operations of the applicant would be internal to the integrated machine versus a collection of discrete machines in the application.

As per claims 62,64 Kayani discloses sorting by denomination (Col 6, line 1) but, does not specifically teach comparing stages as the machine is integrated and could incorporate this feature as part of it's error and comparisons (claim 12d). Since there is no intermediate machine transfers, it would not necessarily be necessary to compare as such or disclose such mechanism. The examiner notes that applicant has combined automated existing machines to perform an operation which mirrors the integrated machine functions of Kayani and Hallowell.

As per claim 63, Kayani does not disclose strapping currency. Hallowell (007) teaches strapping for the purpose of combining currency stacks for easy of handling. It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to combine the currency sorting device of Kayani with the currency processing device strapping feature of Hallowell for the purpose of creating a machine that sorts and straps counted deposit money.

As per claims 65, Kayani (Col 5, line 50) discloses a variety of data which is inputted on cards that are loaded at the first stage. These cards include information such as account data, and teller totals.

As per claim 66, Kayani claims discloses the ability to handle individual teller shift collections (Col 2, line 60). The Examiner notes that a system which is distributed in order to make it portable is not sufficient to patently distinguish over an otherwise old device unless there are unexpected results. (In. re Lindberg, 194 F.2d 732, 93 USPQ 23 (CCPA 1952)).

As per claim 67, Kayani (Co. 5, Line 50) discloses that data is collected on cards, collectable by teller, customer etc and that the data would be inherently summarized and compared with the input separator card.

As per claims 68, Kayani does not disclose subtotals between stages but, as an integrated machine, this feature would be inherently part of the comparison of the input and outputs (claim 12) as, currency must tracked carefully between machine operations and to make sure that the inputs and outputs balance out.

As per claim 69, Kayani's invention does not specifically disclose collecting counts at various stages. Hallowell (0107) teaches collection of totals to the central controller for the purpose of reporting status and accounting. It would therefore have been obvious to

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one of ordinary skill in the art at the time of the invention to combine the currency processing disclosure of Kayani with the tabulation/reporting teachings of Hallowell to report currency totals at various stages including the final stage to a controller that could then provide a report to the user for accounting purposes.

As per claim 72, Kayani discloses the collection of data indicative of an operator, (Col 2, line 55) which includes relevant data related to teller shift collections which would include date, time, teller, customer number etc . (also col. 3, line 1)

As per claim 73, Kayani does not specifically disclose suspending operation after a predetermined number of bills are received though, it would be implicit that the bins would eventually be full. Hallowell teaches a device which counts currency bills and can strap them together after a predetermined number, implying the ability to stop at that predetermined number. (0007) It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to combine the currency processing disclosure of Kayani for the purpose of counting bills and filling bins to combine the ability to stop the process after a predetermined number of bills had been counted so that the pile could be either removed or strapped.

As per claim 74, Kayani does not specifically disclose the ability to resume operations if halted because of a predetermined number of bills have been counted and operation is

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suspending pending operator input. Hallowell (0248) teaches the ability to resume a halted operation for the purpose of efficient operation. It would therefore be obvious to one of ordinary skill in the art at the time of the invention to combine the currency processing system of Kayani with the resume disclosure of Hallowell for the purpose of allowing the resumption of processing which has been suspended with operator input.

As per claim 76, Kayani (Col 2, line 35) teaches a currency processing machine that can take an individual teller's pay-in collections over the course of a shift.

As per claim 77, Kayani does not specifically disclose stopping and starting the process after a predetermined number of bills are counted to an output receptacle nor does Kayani teach restarting the process. Hallowell (0007) and (0248) teach stopping and restarting of the process of counting (see claims 73 and 74) for the purpose of controlling the feeding of receptacles or bins and restarting as required by an operator. It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to combine the currency processing teachings of Kayani with the starting and stopping disclosure of Hallowell for the purpose of stopping the process after bins or receptacles are filled rather than to allow overflow.

Claims 7-10,49 rejected under 35 USC 103(a) as being unpatentable over US Patent 5917930 to Kayani in view of US Patent Publication 2004/0003980 to Hallowell further in view of official notice.

As per claims 7-10, Kayani uses separator cards to track the currency processed at a particular time and by the machine. Hallowell and Kayani do not specifically disclose recording the device number, time, day and operator and shift of the operator for the purpose of tracking particular lots of currency traceable to an operator, device. The examiner takes official notice that tracking operator number, shift and device number are common to computer controlled processes which may require quality or other accountability tracking for the purpose of identifying a machine problem or operator issue. It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to combine tracking disclosure of Kayani with the officially noticed capability of computers to track product in a specialized machine as well as to track operators for the purpose of creating a currency separator/sorter machine which could further help identify mechanical or user "faults".

As per claim 49, Kayani discloses an operator (Col. 3, line 5) and Hallowell discloses a computer for an operator which would incorporate a keyboard and 10 key portion (0080). However, neither specifically discloses a standalone keypad. The examiner takes official notice that 10 number keypad is obvious in the art of commercial machinery, especially one which might require pass codes or other numeric entries and

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might further might not require a computer keyboard. It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to combine the operator interface inherently in Kayani with the computer of Hollowell with the officially noticed keypad commonality to a specialized commercial machine for the purpose of allowing an operator to input passwords or data on a limited scale.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bruce I. Ebersman whose telephone number is (571) 270 3442. The examiner can normally be reached on 630am-5pm, with every Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Dixon can be reached on (571) 272-6803. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Bruce I Ebersman
Examiner
Art Unit 4172

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